Upper Clark Fork River Basin Steering Committee
Meeting Summary
November 16, 2005

Introductions
Gerald Mueller, members of the Upper Clark Fork River Basin Steering Committee (Steering Committee), and public attendees introduced themselves. A list of the members in attendance is attached below as Appendix 1.

Agenda
- Watershed Assistance Grant Update
- Discussion of Basin Water Rights Closure Issue
- Clark Fork River Reconnection Project Pre-application Proposal
- Philipsburg Sewage Plant Discussion
- Post-Adjudication Issue Paper
- Review of the Steering Committee 2005-2006 Work Plan

Watershed Assistance Grant Update
Gerald Mueller reported that Granite Conservation District's grant proposal for funding for the Steering Committee for 2005-2006 had been approved. Writing a report on the flows in the Clark Fork River Basin above Deer Lodge is the major project.

Discussion of Basin Water Rights Closure Issue
Gerald Mueller introduced this topic by reminding the Steering Committee that 85-2-338(5)(a) MCA requires it to review the Upper Clark Fork River basin closure and exceptions no less than every five years and to recommendation necessary changes to the Legislature. This is the fifth year, so a report is due by the end of the year.

Bill Schultz then summarized how the closure has affected two water users located just upstream and downstream of Milltown Dam, the closure boundary. The developer of a new subdivision near Turah applied for a permit for a community well located 400 feet from the Clark Fork River that would provide 150 gallons per minute to 67 homes. Because this development is upstream of the Milltown Dam and within the upper Clark Fork basin, it is subject to the requirement that an applicant for a ground water permit must submit a report prepared by a professional engineer or hydrologist addressing the hydrologic connection between the source of the ground water and surface water. The applicant's consulting hydrologist determined that the proposed well would be connected to the river. The DRNC concurred with this finding and denied the permit. The applicant therefore opted for an augmentation plan in which he would purchase a water right that would leave in the river the amount of water that his well would withdraw from it. The applicant is currently seeking a change of use for his purchased right. In the mean time, DNRC has issued an interim ground water permit pending completion of the change process. Because of the closure statutory requirements, this water user has been subject to considerable expense and time to receive a permit for his well. This situation is contrasted with the experience of a water user located just downstream of Milltown Dam. In this case, the developer of a new golf course filed for a permit for a new well located one third of a mile from the Clark Fork River that would pump 1,500 gallons per minute. Because this well would not be in the closure area, the applicant

is not required to file an engineering report addressing its connection to the river; instead, he need only demonstrate the legal and physical availability of water. This permit has been issued because no other water user objected to its issuance. After a discussion, the Steering Committee agreed that the different experience by these two water users reflects the different legal standards that each must meet as a result of their locations just inside and outside the closure area, not a problem with the closure per se.

Mr. Mueller noted that the statutory definition of the upper Clark Fork River basin refers to the Milltown Dam, and this dam is scheduled to be removed as a result of the Superfund cleanup. The Steering Committee agreed that it should report to the Legislature the need to change the legal definition to refer to the confluence of the Blackfoot and Clark Fork Rivers rather than the Milltown Dam. It directed Mr. Mueller to report this change to the Legislature as the only one needed in the closure at this time. Mr. Mueller agreed to draft and circulate a letter for Steering Committee member comment. After allowing for these comments, the letter will be sent to the Environmental Quality Council to fulfill the Steering Committee's reporting requirement.

Clark Fork River Reconnection Project Pre-application Proposal

Mr. Mueller passed out a preliminary draft of a pre-application to the Natural Resource Damage Program for a project to conduct a reconnaissance level study to identify promising sites for reconnecting the Clark Fork River to its former channel in the Garrison to Rock Creek reach. He stated that he discussed the project idea with two Professors in the Center for Riverine Science of the UM Department of Geology, Dr. Bill Woessner and Dr. Johnny Moore. Both indicated their interest in working with the Steering Committee on the project should it proceed. They also stated that it would be good project for a graduate student, assuming a budget of about $35,000. Mr. Mueller also reported on a call from Carol Fox asking that the Steering Committee not proceed with a pre-application at this time because it would involve the mainstem of the Clark Fork River and the litigation involving the mainstem is not yet resolved. Given Ms. Fox recommendation, the Steering Committee agreed not to submit a pre-application and to put activities related to this project on hold pending resolution of the litigation.

Philipsburg Sewage Plant

Dick Hoehne, who manages the Philipsburg sewage treatment plant, and Gary Swanson, engineering consultant to the City of Philipsburg, summarized the situation with the Philipsburg sewage treatment plant. See Appendix 3 below. They stated that the lagoon is undersized and leaking and the City needs to upgrade the facility. The City is also facing a new subdivision, the developer of which is interested in connecting to the City system. Should the subdivision be fully developed, it would almost double the number of existing hookups from 500 to 950. The City has several concerns regarding the potential sewage plant upgrade:

- Current levels of nitrogen and phosphorus in Flint Creek, the water body into which the sewage plant discharges, exceed the levels under consideration for water quality standards for Flint Creek.
- The best available technology may not be adequate to meet the proposed nitrogen standard level.
- The city has only 500 families that currently pay for the sewage treatment system, and half of those are moderate or low income; the cost of the plant upgrade will likely be $3.2-4 million.
- Land application of the sewage plant effluent may be twice as expensive and may not be a practical alternative to upgraded treatment because of soil permeability and the amount of land that would be required (200 acres).
- If the City proceeds with upgrading the plant using existing technology would additional

requirements be added later?
- What instream monitoring is appropriate for the City?

Mike Suplee and Richard Opper responded to these concerns making the following points:
- They appreciate the opportunity at this meeting to discuss this situation with City officials.
- The standards for Flint Creek are not set, and will not be adopted for some time; decisions on the design of the sewage treatment plant should probably proceed based on guidance levels rather than final standards.
- The reference level for the proposed standards for Flint Creek was based on water quality in 40 different streams, not Rock Creek alone.
- Given the existing instream levels of nitrogen and phosphate, the state of existing removal technology, and the financial situation of Philipsburg residents, an exemption from standards that may be set in the future may be appropriate in this case. The DEQ has just begun to examine the process by which exemptions or variances might be implemented.
- DEQ will seek to avoid ratcheting the standards.
- DEQ would prefer to see the new subdivision connected to the city sewer system rather than utilize individual septic systems.
- DEQ will work with the City to develop an appropriate monitoring plan.
- DEQ will identify one point of contact within the Department to ensure coordination in its continued discussions with the City.

The Steering Committee agreed to keep tabs on the DEQ-City discussions and to continue to help facilitate them as needed.

Post-Adjudication Issue Paper

Mr. Mueller requested comments on the September 2005 draft of the paper entitled, "How Will Completion of the Adjudication Affect Water Management in Montana?" Because Steering Committee members particularly interested in the paper were unable to attend today's meeting, decision to adopt and release the paper was postponed until the next meeting.

Work Plan Review

The Steering Committee reviewed and made no changes to its work plan except for the indefinite postponement of the Clark Fork River mainstem reconnection project as discussed above. Mr. Mueller said that, given that no specific funding is available to do so, he was not sure how to pursue the survey of water user expectations for the adjudication. He said that he will have discussions with UM faculty to see if they or their students would be interested in designing and conducting the survey in cooperation with the Steering Committee.

Public Comment

Several members of the public participated in the discussion of the Philipsburg treatment plant with Mr. Opper and Suplee. The public expressed appreciation for the Steering Committee's efforts to arrange for the discussion.

Next Meeting

The next meeting was scheduled for Tuesday, January 10, 2006. The agenda will include:
- Update on the DEQ-Philipsburg sewage treatment plant discussions;

- Report on the Deer Lodge sewage treatment land application project;
- Report on the NRCS EQIP process;
- A presentation by DEQ about the implementation of its TMDL program;
- Report on the adjudication survey status;
- Adoption of the post-adjudication paper; and
- Report on the status of the upper Clark Fork water story.

Appendix 1

Steering Committee Member, Staff and Public Attendance List
November 16, 2005

Members	Group/Organization Represented
Eugene Manley	Montana Water Resources/Granite County
Bob Benson	Clark Fork Coalition
Jim Dinsmore	Granite Conservation District
Jim Quigley	Rancher/Little Blackfoot River Watershed
Jules Waber	Powell County
Brent Mannix	North Powell Conservation District
Staff	
Mike McLane	DNRC
Gerald Mueller	Facilitator
Public	
Richard Opper	Director, Montana Department of Environmental Quality (DEQ)
Mike Suplee	DEQ
Anne Fillmore	Mayor of Philipsburg
Richard Hoehne	City of Philipsburg
Gary Swanson	Robert Peccia & Associates/City of Philipsburg
Susan Browning	Granite County Commissioner
Larry Carahan	Granite County Commissioner
Ray Waldbillig	Georgetown Lake Dam Tender
Bill Schultz	DNRC Water Resources Division - Missoula Region
Will McDowell	Tri-State Implementation Council
Matt Clifford	Clark Fork Coalition
Tracy Stone-Manning	Clark Fork Coalition
Maureen Connor	The Philipsburg Mail

Appendix 2
Clark Fork River Reconnection Project Summary

The Upper Clark Fork River Basin Steering Committee in partnership with the Granite Conservation District seeks a Project Development Grant of $XX,XXX to conduct a reconnaissance level study to identify promising sites for reconnecting the Clark Fork River to its former channel in the Garrison to Rock Creek reach. At various times over the last hundred years, development of transportation corridors forced the confinement of the river to narrow channels cutting off meanders and significantly reducing river length. This confinement to straight stretches isolates the river from its flood plain, increases flow velocity, disrupts surface and ground water exchanges, increases water temperature, and increases bank erosion and sediment loading. These impacts, in turn, adversely affect the aquatic ecosystem including the fishery. By breaching embankments or installing culverts or bridges, the river may be reconnected to its former bed reversing these impacts.

A map of the project area is attached. A preliminary review of aerial photo graphs of the river corridor indicates at least XX instances in which railroad lines, county roads, and/or Interstate 90 have cut off river meanders. This study would categorize each opportunity for reconnection using the following factors:

- Land ownership
- Type and number of reconnection actions required, i.e. breaching embankments, installing culverts, or building bridges
- River and former meander elevations
- Length of river reconnection would add
- Metals contamination

The $XX,XXX would be used to hire a contractor to determine land ownership, measure river and former channel elevations, measure river length gains using aerial photography, measure total copper concentrations in cut off sections, determine what type of structures would be required to make the reconnections. The study would be conducted over a two month period in late summer or early fall when river flows are normally reduced.

Appendix 3

Upper Clark Fork river Basin Steering Committee
October 4, 2005

1. Proposed in-stream standards for Philipsburg are approximately 0.3mg/l for total nitrogen and 0.03 mg/l for total phosphorous per MDEQ.
    a. Based on old and current data the stream already significantly exceeds the proposed standards.
    b. MDEQ has indicated that because the stream exceeds the proposed standards that Philipsburg's wastewater discharge will have to meet or exceed the in-stream standard values.
    c. Philipsburg has initiated a sampling program to monitor N & P in Flint Creek. Samples are being taken below Georgetown Lake, and above and below the lagoons. Initial results below:

DATE	PARAMETER	FLINT CREEK BELOW GEORGETOWN LAKE MG/L	FLINT CREEK ABOVE PBURG. LAGOONS MG/L	FLINT CREEK BELOW PBURG. LAGOONS MG/L	LAGOON EFFLUENT MG/L
July 05	Total Nitrogen	0.69	0.67	0.82	6.6
	Total Phosphorous	.046	.038	.026	2.1
	Ammonia	0.29	0.16	0.16	2
August 05	Total Nitrogen	1.2	0.83	0.83	9.1
	Total Phosphorous	.032	.061	.069	1.8
Sept. 05	Total Nitrogen	0.35	0.21	0.29	8.8
	Total Phosphorous	.039	.053	.038	1.7
Note lagoon discharge ranges between 110 gpm to 200 gpm (0.24 cfs to .45 cfs) Stream flow approx 95 cfs Lagoons contribute approximately 0.3 % of creek flow in summer					

2. Proposed Improvements
    a. Mechanical plant with nutrient removal
        i. Technology not available to meet TN in stream standards. May be able to achieve TP in stream standards.
        ii. Cost to Town $3.2 to $ 4 million dollars.
        iii. Annual cost to Town with loan payback and annual O&M is at least $264,000, which equates to $44 per month per user rate increase to a total of $75 per month for sewer alone. This assumes the Town can obtain at least $1.1 million in grant funding. Required improvements to collection system could add another $20 per month. Philipsburg has 50% LMI households.
    b. Total retention with land application
        i. Cost is $5.9 to $8.9 million. Majority of cost is for lined storage lagoons.
        ii. May not be feasible due to soil types.

iii. Need at least 200 acres of land, which may not be available.

3. Project Strategy
    a. Complete wastewater preliminary Engineering Report
    b. Continue with water quality sampling of Flint Creek and flow measurements
    c. Work with MDEQ on Flint Creek standards, TMDL and proposed wastewater treatment system
    d. Conduct public hearings to obtain public input and support
    e. Apply for project funding in Spring of 2006
    f. Design and construct improvements – if funding successful could start in 2007
4. Assistance needed
    a. Planning, sampling and flow measurement costs
    b. Selling the need of the required improvements to the citizens of Philipsburg
    c. Assistance with obtaining additional funding for project design and construction
        i. Letters to funding agencies and congressional delegation in support of the project.